

530-Z-92-017

Thursday
October 15, 1992

Final Rule

Part II

Environmental Protection Agency

40 CFR Parts 261 et al.

**Hazardous Waste Management System:
Identification and Listing of Hazardous
Waste and CERCLA Hazardous
Substance Designation; Reportable
Quantity Adjustment, Chlorinated
Toluenes Production Wastes; Rule**



Printed on Recycled Paper

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 261, 271, and 302

(ISWH-FRL-4194-31)

Hazardous Waste Management System: Identification and Listing of Hazardous Waste and CERCLA Hazardous Substance Designation; Reportable Quantity Adjustment, Chlorinated Toluene Production Wastes**AGENCY:** U.S. Environmental Protection Agency.**ACTION:** Final rule.

SUMMARY: The U.S. Environmental Protection Agency (EPA) is amending the regulations for hazardous waste management under the Resource Conservation and Recovery Act (RCRA) by adding three wastes generated during the production of the alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups, collectively referred to in this document as "chlorinated toluenes," to the list of hazardous wastes from specific sources. EPA is also amending appendix VII of 40 CFR part 261 to add the constituents for which these wastes are being listed. The effect of this regulation is that these three wastes will be subject to regulation as hazardous wastes. In addition, EPA is amending regulations promulgated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) that are related to today's waste listings. In particular, EPA is amending CERCLA regulations by designating the listed wastes as CERCLA hazardous substances and establishing the reportable quantities applicable to these wastes.

DATES: Today's final rule will become effective on April 15, 1993. See section VII of the Supplementary Information section concerning compliance dates.

ADDRESSES: The official record for this rulemaking is identified as Docket Number F-92-LCTF-FFFF and is located in the EPA RCRA Docket, room M2427, 401 M Street, SW., Washington, DC 20460. The docket is open from 9 a.m. to 4 p.m., Monday through Friday, excluding Federal holidays. The public must make an appointment to review docket materials by calling (202) 260-9327. The public may copy 100 pages from the docket at no charge; additional copies are \$0.15 per page.

FOR FURTHER INFORMATION CONTACT: The RCRA/Supfund Hotline, toll-free

at (800) 424-9348 or locally at (703) 920-9810. For technical information on the RCRA hazardous waste listings, contact Dr. Ambika Bathija, Office of Solid Waste (OS-333), U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460, (202) 260-4770.

For technical information on the CERCLA portion of the rule, contact Ms. Gerain Perry, Response Standards and Criteria Branch, Emergency Response Division (OS-210), U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460, (202) 260-2190.

SUPPLEMENTARY INFORMATION:

- I. Authority
- II. Background
 - A. Proposed Rule
 - B. HSWA and *EDF v. Reilly*
- III. Summary of the Regulation
 - A. Overview of the Final Rule
 - B. Basis for Listing
 - C. Agency Response to Public Comments
- IV. Impact of Future Land Disposal Restrictions (LDR) Determinations
- V. State Authority
 - A. Applicability of Final Rule in Authorized States
 - B. Effect on State Authorizations
- VI. CERCLA Designation and Reportable Quantities
 - A. Reporting Requirements
 - B. Adjustment of RQs
- VII. Compliance Dates
 - A. Notification
 - B. Interim Status
 - C. Permitting Requirements
- VIII. Economic Analysis
- IX. Regulatory Flexibility Act
- X. Paperwork Reduction Act

I. Authority

These regulations are being promulgated under the authority of sections 2002(a) and 3001(b) and (e)(1) of the Solid Waste Disposal Act, as amended, 42 U.S.C. 6912(a) and 6921(b) and (e)(1) (commonly referred to as RCRA), and section 102(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) 42 U.S.C. 9602(a).

II. Background

EPA proposed to list as hazardous three wastes from chlorinated toluene production on October 11, 1991. Today's notice promulgates these listings, presented in Section II.C. of the proposed rule, with no substantive modification.

A. Proposed Rule

Pursuant to section 3001 of subtitle C of the Resource Conservation and Recovery Act (RCRA), EPA proposed to list three wastes as hazardous in a notice published in the Federal Register on October 11, 1991 (see 56 FR 51592). At that time, EPA also proposed a no-list decision for three other wastes from

chlorinated toluene production. One other waste from chlorinated toluene production is already regulated as a hazardous waste under RCRA: EPA Hazardous Waste Number K015—still bottoms from the distillation of benzyl chloride (promulgated on November 12, 1980; see 45 FR 74884). The Agency noted, in the proposal, that the scope of K015 was not affected by the proposed rule.

EPA proposed to add three waste streams generated from the production of the alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups, collectively referred to in the proposed rule as "chlorinated toluenes," to the list of hazardous wastes from specific sources found at 40 CFR 261.32. These wastes, which were fully described in the preamble to the proposed rule, are distillation bottoms generated from the production of chlorinated toluenes (K149); the organic residuals generated in the recovery of byproduct hydrochloric acid (HCl) associated with the manufacture of chlorinated toluenes (K150); and wastewater treatment sludges, excluding neutralization sludges and biological sludges, generated during the treatment of wastewaters from the manufacture of chlorinated toluenes (K151).

The basis for this proposed regulation was a determination by the Agency that these wastes frequently contain significant concentrations of benzene, benzotrifluoride, benzyl chloride, carbon tetrachloride, chlorobenzene, chloroform, chloromethane, 1,4-dichlorobenzene, hexachlorobenzene, pentachlorobenzene, 1,2,4,5-tetrachlorobenzene, 1,1,2,2-tetrachloroethane, tetrachloroethylene, toluene, and/or 1,2,4-trichlorobenzene. These compounds, at the concentrations found in chlorinated toluene wastes, present a threat to human health and the environment when the wastes are mismanaged because of their toxicity, mobility, and persistence. These constituents may be carcinogenic, mutagenic, and/or exhibit other chronic systemic effects at certain concentrations. Based on their physical properties and the evidence from damage incidents, EPA has found that most of these constituents are highly persistent and are mobile in the environment. EPA fully described the data documenting the hazards posed by these wastes in the preamble to the proposed rule. See 56 FR 51596-51602. Because these wastes are capable of posing a threat to human health and the environment when they are improperly

treated, stored, transported, disposed of, or otherwise managed, EPA proposed to list them as hazardous. Consequently, as stated in the proposed rule, these wastes would be subject to the applicable requirements of 40 CFR parts 124, 262-266, 268, 270, and 271.

In addition to the Agency's decision to list three wastes from chlorinated toluenes production, the Agency proposed a decision not to list three other wastes from chlorinated toluenes production: wastewaters, spent carbon, and neutralization and biological treatment sludges. Based on information collected by the Agency, these wastes do not meet the criteria for listing as hazardous wastes. The rationale for these no-list determinations was described in detail in the preamble to the proposed rule and is summarized below.

Wastewaters, which are generated throughout the manufacturing processes, contain low concentrations of the constituents of concern. In addition, the production wastewaters at the four chlorinated toluenes manufacturing facilities are treated prior to off-site discharge, thus further reducing the risks these wastes present to human health and the environment.

Spent carbon wastes, generated during the recovery and purification of byproduct hydrochloric acid, also were proposed not to be listed. Most constituents in these residuals are present at relatively low levels. The organic constituents in the spent carbon waste matrix are expected to adhere strongly to the carbon matrix by adsorption, and thus be significantly less mobile than in other matrices such as distillation bottoms. Therefore, spent carbon is not expected to present a significant risk to human health and the environment if mismanaged and therefore does not warrant listing as a hazardous waste.

The composition of wastewater treatment sludges has been found to vary significantly depending on treatment process. The Agency has made a diligent effort to determine the specific wastes from wastewater treatment operations that contain high levels of toxic constituents and to list only those waste streams. Specifically, neutralization and biological sludges have been found to contain contaminants at low levels, if they are detected at all. The levels in these wastes are significantly less than constituent levels found in those gravity separation sludges proposed for listing.

B. HSWA and EDF v. Reilly

On November 8, 1984, the Hazardous and Solid Waste Amendments of 1984

(HSWA), which amended RCRA, were enacted. These amendments had far-reaching ramifications for EPA's hazardous waste regulatory program. Section 3001(e)(2), which was one of the many provisions added by HSWA, directed EPA to make a determination whether to list under section 3001(b)(1) several wastes, including chlorinated aromatics wastes. As discussed in the preamble to the proposed rule, the chlorinated aromatics industry can be divided into three major segments: Chlorinated benzenes, chlorinated phenols, and chlorinated toluenes. Wastes produced by the first two segments of the industry are currently listed as hazardous. See 56 FR 51594 (October 11, 1991). On June 19, 1991, EPA entered into a proposed consent decree which resolved issues raised in *EDF v. Reilly*, Civ. No. 89-0598 (D.D.C.). Under this decree, EPA was required, in part, to propose a decision regarding the listing of chlorinated toluenes production wastes by September 1991 and to finalize the decision by September 1992. Today's regulation fulfills this latter requirement of the proposed consent decree and completes the investigations that were underway to study wastes from the chlorinated aromatics industry when HSWA was enacted.

The proposed rule (56 FR 51592) specifically addressed, and today's rule finalizes, the determinations for each of the wastes listed in the proposed consent decree (see Table 1).

In its study of the industry, the Agency sampled wastes and gathered information on specific wastes generated from the production of the various types of chlorinated toluene compounds enumerated in the consent decree. Based on this information, the Agency concluded that wastes from the production of alpha-chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups are very similar and that it is therefore reasonable to identify wastes from these processes as a group. For example, EPA proposed that organic condensates and decantates from the production of all types of chlorinated toluenes be identified as a group and listed as K150 regardless of product identification. Therefore, today's regulation characterizes the wastes at issue differently than the proposed consent decree, which specifies exactly which production wastes are to be the subject of a listing determination. It should be emphasized, however, that the scope of today's rulemaking encompasses all those wastes discussed in the proposed consent decree. The regulatory decisions

concerning the wastes presented in the proposed consent decree, as finalized in today's rule, are presented in Table 1.

TABLE 1.—REGULATORY STATUS OF WASTE STREAMS IDENTIFIED IN THE EDF v. REILLY PROPOSED CONSENT DECREE

Decree waste	Regulatory status
Still bottoms from p-chlorobenzoyl chloride production via catalytic steam hydrolysis.	K149
Still bottoms from production of trichlorotoluene via Lewis acid catalysts.	K149
Still bottoms from production of dichlorotoluene via Lewis acid catalysts.	K149
Spent carbon, filter media, filter cartridges and filtered solids from production of benzotrichloride and benzoyl chloride via HCl recovery.	No-list
Spent carbon, filter media, filter cartridges and filtered solids from production of benzoyl chloride, p-chlorobenzotrichloride and benzotrichloride via HCl recovery.	No-list
Spent H ₂ SO ₄ from production of benzoyl chloride, benzotrichloride, and p-chlorobenzotrichloride via HCl recovery.	No-list
Still bottoms from benzoylchloride production via catalytic steam hydrolysis.	K149
Still bottoms from production of o-chlorotoluene, p-chlorotoluene, and dichlorotoluene.	K149
Still bottoms from production of dichlorobenzoyl chloride.	K149
Organic liquids (condensates and decantates) from production of benzotrichloride/benzoyl chloride.	K150
Organic liquids (condensates and decantates) from production of dichlorobenzoyl chloride, benzotrichloride, and p-chlorobenzoyltrichloride.	K150
Organic liquids (condensates and decantates) from production of benzoyl chloride, benzotrichloride, and p-chlorobenzotrichloride.	K150
Wastewaters from production of one or more chlorinated toluenes.	No-list
Wastewater treatment sludges from production of one or more chlorinated toluenes.	Separation sludges: K151 Neutralization and biological sludges: No-list

III. Summary of the Regulation

A. Overview of the Final Rule

As proposed on October 11, 1991, this rule adds to the list of hazardous wastes from specific sources found at 40 CFR 261.32 three wastes generated during the production of chlorinated toluenes:

K149 Distillation bottoms from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups. [This waste does not include still bottoms from the distillation of benzyl chloride.]

K150 Organic residuals, excluding spent carbon adsorbent, from the spent chlorine gas and hydrochloric acid recovery processes associated with the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.

K151 Wastewater treatment sludges, excluding neutralization and biological sludges, generated during the treatment of wastewaters from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.

These wastes are therefore subject to the applicable requirements of 40 CFR parts 124, 262-266, 268, 270, and 271. EPA is also amending appendix VII at 40 CFR part 261 to add the constituents for which these wastes are being listed. In addition, for the reasons explained in the preamble to the proposed rule and summarized above, EPA is finalizing its determination not to list wastewaters, spent carbon, and neutralization and biological treatment sludges from chlorinated toluenes production.

Finally, as proposed, EPA is amending the CERCLA regulations at 40 CFR part

302 by designating hazardous wastes K149, K150, and K151 as hazardous substances and finalizing RQs of 10 pounds for each of these waste streams.

The listings being finalized today will reduce the risks posed by these wastes to human health and the environment. These listings will prevent the uncontrolled entrance of toxic constituents into the ground water, surface water, soil, and air by requiring environmentally sound management of these wastes. In order to further reduce the potential risk posed by these and other wastes, the Agency encourages the implementation of cost effective pollution prevention programs, source controls, and other efforts to reduce the volume of generated wastes. Such programs may be economically advantageous to generators due to the reduced management costs that accompany a reduction in the amount of wastes generated.

The Agency has determined that the industry-wide economic effect of this listing will be annualized incremental costs of approximately \$12,000, which represents an insignificant cost to society. A principal reason for this anticipated low additional cost is that the subject wastes are presently being managed as hazardous by industry.

B. Basis for Listing

After considering the relevant factors outlined in 40 CFR § 261.11(a)(3), the Agency has determined that the wastes

being listed as hazardous today are capable of presenting a substantial risk to human health and the environment when mismanaged. In particular, the Agency has found that these wastes frequently contain significant concentrations of toxic constituents which are highly mobile and persistent in the environment.

In general, the information presented in the preamble and in support of the proposed rule remains the best and most current available to EPA and serves as the basis for today's listing determinations (56 FR 57592, October 11, 1992). The Agency has, however, updated Tables 3, 4, and 5 of the preamble to the proposed rule (denoted as Tables 2, 3, and 4 of today's preamble) to reflect the most current information available to the Agency regarding the toxicity of the constituents of concern present in the wastes being listed today. Table 2 presents the constituents of concern and their concentrations in the wastes and concentrations that may reach potential human and environmental receptors and compares these levels with oral HBLs of concern. Tables 3 and 4 provide information on oral and inhalation HBL toxicity sources. The Agency notes that the changes reflected in these tables have had no effect on the Agency's listing determinations.

TABLE 2.—BASIS FOR LISTING: HAZARDOUS CONSTITUENTS AND LEVELS OF CONCERN (ORAL ROUTE)

	Median waste concentration (mg/kg)	Health-based levels (HBL) (mg/L)	Waste level to HBL ratio	100×HBL (mg/L)	Waste level to 100×HBL ratio
Distillation or fractionation bottoms from the production of chlorinated toluenes (K149):					
Benzotrifluoride.....	70,000	3×10^{-6}	2×10^{10}	3×10^{-4}	2×10^8
Benzyl Chloride.....	>750	2×10^{-4}	4×10^6	2×10^{-2}	4×10^4
Chlorobenzene.....	>300	1×10^{-1}	3×10^3	1×10^1	3×10^1
Chloroform.....	50	6×10^{-3}	8×10^3	6×10^{-1}	8×10^1
Chloromethane.....	7,000	3×10^{-3}	2×10^6	3×10^{-1}	2×10^4
1,4-Dichlorobenzene.....	>700	7.5×10^{-3}	9×10^3	7.5	9×10^1
Hexachlorobenzene.....	3,500	1×10^{-3}	4×10^6	1×10^{-1}	4×10^4
Pentachlorobenzene.....	1,500	3×10^{-3}	5×10^4	3	5×10^2
1,2,4,5-Tetrachlorobenzene.....	250	1×10^{-3}	3×10^4	1	3×10^3
Toluene.....	3,000	1	3×10^3	1×10^2	3×10^1
Organic residuals from the spent chlorine gas and hydrochloric acid recovery processes associated with the production of chlorinated toluenes (K150):					
Carbon Tetrachloride.....	550	5×10^{-3}	1×10^6	5×10^{-1}	1×10^3
Chloroform.....	45	6×10^{-3}	8×10^3	6×10^{-1}	8×10^1
Chloromethane.....	13,500	3×10^{-3}	5×10^6	3×10^{-1}	5×10^4
1,4-Dichlorobenzene.....	3,200	7.5×10^{-3}	4×10^6	7.5	4×10^4
Hexachlorobenzene.....	2,000	1×10^{-3}	2×10^6	1×10^{-1}	2×10^4
Pentachlorobenzene.....	2,100	3×10^{-3}	7×10^4	3	7×10^2
1,2,4,5-Tetrachlorobenzene.....	7,000	1×10^{-3}	7×10^6	1	7×10^3
1,1,2,2-Tetrachloroethane.....	>125	2×10^{-4}	6×10^6	2×10^{-2}	6×10^4
Tetrachloroethylene.....	150	5×10^{-3}	3×10^4	5×10^{-1}	3×10^3
1,2,4-Trichlorobenzene.....	12,000	7×10^{-3}	2×10^6	7	2×10^4
Wastewater treatment sludges, excluding neutralization and biological sludges (K151):					
Benzene.....	>100	5×10^{-3}	2×10^4	5×10^{-1}	2×10^3
Carbon tetrachloride.....	75	5×10^{-3}	2×10^4	5×10^{-1}	2×10^3

TABLE 2.—BASIS FOR LISTING: HAZARDOUS CONSTITUENTS AND LEVELS OF CONCERN (ORAL ROUTE)—Continued

	Median waste concentration (mg/kg)	Health-based levels (HBL) ¹ (mg/L)	Waste level to HBL ratio	100×HBL (mg/L)	Waste level to 100×HBL ratio
Chloroform.....	190	6×10^{-3}	3×10^4	6×10^{-1}	3×10^2
Hexachlorobenzene.....	>500	1×10^{-3}	5×10^5	1×10^{-1}	5×10^3
Pentachlorobenzene.....	>200	3×10^{-3}	7×10^3	3	7×10^1
1,2,4,5-Tetrachlorobenzene.....	>150	1×10^{-2}	2×10^4	1	2×10^2
Tetrachloroethylene.....	>250	5×10^{-3}	5×10^4	5×10^{-1}	5×10^2
Toluene.....	34,000	1	3×10^4	1×10^2	3×10^2

¹ Health-based levels (HBLs) are based on either MCLs, RSDs, or RfDs as described in the October 11, 1991 proposed rule.

* The HBL for this constituent is the new MCL (see 57 FR 31778 (July 7, 1992)) and differs from the proposed MCL (see 56 FR 51598 (October 11, 1991)) because of a change in the RfD. However, the concentration of this constituent in K150, as well as the levels that may reach potential human or environmental receptors, exceed both the proposed level and the one used in today's rule.

TABLE 3.—ORAL HBL TOXICITY SOURCES

Constituent	Class	Slope factor (mg/kg/day) ¹	Carcin HBL (mg/L)	RfD (mg/kg/day)	Toxicity HBL (mg/L)	MCL (mg/L)	HBL leachate (mg/L)	Interim HBL
Benzene.....	A	2.9×10^{-2}	1×10^{-3}			5×10^{-3}	5×10^{-3}	
Benzo(a)anthracene.....	B2	1.3×10^1	3×10^{-6}				3×10^{-6}	
Benzyl Chloride.....	B2	1.7×10^{-1}	2×10^{-6}				2×10^{-6}	
Carbon Tetrachloride.....	B2/S	1.3×10^{-1}	3×10^{-4}	7×10^{-4}	2×10^{-3}	5×10^{-3}	5×10^{-3}	
Chlorobenzene.....	D/S			2×10^{-2}	7×10^{-1}	1×10^{-1}	1×10^{-1}	
Chloroform.....	B2/S	6.1×10^{-3}	6×10^{-3}	1×10^{-2}	4×10^{-1}		6×10^{-3}	
Chloromethane.....	C	1.3×10^{-2}	3×10^{-3}				3×10^{-3}	
1,4-Dichlorobenzene.....	C	2.4×10^{-2}	1×10^{-3}			7.5×10^{-2}	7.5×10^{-2}	
Hexachlorobenzene.....	B2/S	1.6	2×10^{-3}	8×10^{-4}	3×10^{-2}	1×10^{-3}	1×10^{-3}	
Pentachlorobenzene.....	S			3×10^{-4}	1×10^{-2}		1×10^{-2}	
1,2,4,5-Tetrachlorobenzene.....	S						1×10^{-2}	
1,1,2,2-Tetrachloroethane.....	C	2×10^{-1}	2×10^{-4}				2×10^{-4}	
Tetrachloroethylene.....	*	5.1×10^{-2}	7×10^{-4}	1×10^{-2}	4×10^{-1}	5×10^{-3}	5×10^{-3}	
Toluene.....	D/S			2×10^{-1}	7	1	1	
1,2,4-Trichlorobenzene.....	D/S			1×10^{-2}	4×10^{-1}	7×10^{-2}	7×10^{-2}	

A, B2, C, and D refer to carcinogenic classes, S refers to systemic toxicants.

* EPA is currently deliberating concerning this classification. For more information, see the discussion in Section III.C.4 of this notice.

** Compound is currently under review, and RfD or CSF values are not considered verified.

RfDs and CSFs obtained from: Integrated Risk Information System, 1991; Health Effects Assessment Summary Tables, FY 1991, OERR 9200.6-303 (91-1), January 1991; Health Effects Assessment Summary Tables, OHEA ECAO-CIN-821, March 1992.

TABLE 4.—INHALATION HBL TOXICITY SOURCES

Constituent	Class	Slope factor (mg/kg/day) ¹	Carcin HBL ($\mu\text{g}/\text{m}^3$)	RfC (mg/kg/day)	Toxicity HBL ($\mu\text{g}/\text{m}^3$)	Status
Benzene.....	A	2.9×10^{-2}	0.1			a
Benzo(a)anthracene.....	B2	ND				b
Benzyl chloride.....	B2	ND				
Carbon tetrachloride.....	B2	5.3×10^{-2}	0.07			a,b,c
Chlorobenzene.....	D/S			5×10^{-3}	20	d,f
Chloroform.....	B2	8.1×10^{-2}	0.04			a
Chloromethane.....	C	6.3×10^{-3}	0.6			b
1,4-Dichlorobenzene.....	B2/S	ND		0.2	700	d
Hexachlorobenzene.....	B2	1.6	0.002			a,c
Pentachlorobenzene.....				ND		
1,2,4,5-Tetrachlorobenzene.....				ND		
1,1,2,2-Tetrachloroethane.....	C	2×10^{-1}	0.02			a
Tetrachloroethylene.....	*	2×10^{-3}	2	ND		g
Toluene.....	D/S			0.11	400	d
1,2,4-Trichlorobenzene.....	S			2.6×10^{-3}	9	f

A, B2, C, and D refer to carcinogenic classes, S refers to systemic toxicants.

a Verified; b Under CRAVE review; c Based upon route-to-route extrapolation; d Under work group review

f Derived from methodology that is not current with the interim inhalation methodology used by the RfD/RfC work group

g Under review

ND—Values not derived in the source document

* EPA is currently deliberating concerning this classification. For more information, see the discussion in Section III.C.4 of this notice.

** Compound is currently under review, and RfD or CSF values are not considered verified.

HBLs calculated from RfD, RfC, or slope factors from the Integrated Risk Information System (IRIS), 1991; Health Effects Assessment Summary Tables (HEAST), OHEA ECAO-CIN-821, March 1992; Health Effects Assessment Summary Tables (HEAST), OERR 9200.6-303 (9-91), January 1991.

C. Agency Response to Public Comments

Four commenters responded to the Agency's October 11, 1991, proposed rule. The Agency has carefully considered all the comments in preparation of this final rule. The comments the Agency received can be summarized as follows:

1. Listing wastes that are currently managed as characteristically hazardous precludes the successful completion of waste reduction/waste minimization and pollution prevention efforts.

2. Because of current management practices, a small percentage of a listed waste will cause a large volume of characteristic waste to be listed as the result of the mixture rule. Segregation of the two streams is economically prohibitive.

3. The Agency has overlooked the inclusion of one facility's waste in calculating the volume of K151 generated.

4. The weight-of-evidence carcinogenicity classification for chloromethane and perchloroethylene should be corrected, and other minor technical and typographical corrections should be made.

5. A typographical error appears in the way K149 is defined in the proposed rule.

6. The Agency's listing action should be accompanied by an "automatic delisting" provision that would remove a generator's waste from regulation as a listed waste when the waste no longer exhibits any RCRA hazardous waste criteria.

In this preamble, the Agency is providing analyses of and responses to all comments.

1. Effect of Listing on Waste Reduction Efforts

One commenter, a chlorinated toluenes manufacturer, stated that it generates all three subject waste streams and presently manages all as characteristically hazardous (K149 as corrosive and K150 and K151 as ignitable). The commenter objected to the proposed listing because such an action reduces the benefit of the facility's waste minimization efforts to decrease the corrosivity and ignitability of the subject wastes to below characteristic levels.

The Agency has decided to list these wastes because they frequently contain a number of toxic constituents (at levels several-fold higher than the HBLs) that are persistent and mobile in the environment. These wastes, therefore, could impact adversely human health

and the environment if improperly managed. The elimination of the hazardous waste characteristics from these wastes (i.e., ignitability and corrosivity) would not necessarily address the potentially toxic levels of the constituents that have been identified in these wastes. For example, using neutralization to eliminate the corrosivity of the waste would not necessarily reduce its toxicity.

The Agency encourages the commenter to decrease the volume of its hazardous wastes. However, as stated above, the commenter's efforts to eliminate the ignitable and corrosive nature of the wastes would not necessarily remove the toxic constituents in the wastes, which could potentially harm human health and the environment due to their high concentrations. The Agency therefore maintains that it is important to list as hazardous these wastes which contain toxic contaminants not already controlled by the RCRA ignitable and corrosive characteristics.

2. Secluded Management and Cost of Listing

One commenter, a chlorinated toluenes manufacturer, presently mixes one of the chlorinated toluenes production wastes with other nonlisted, nonchlorinated toluene process wastes during wastewater treatment. The entire waste stream is currently hazardous due to the characteristic of ignitability, although the commenter is conducting efforts to render the stream non-hazardous. The commenter states that, because of the mixture rule under 40 CFR 261.3, its entire separator bottoms stream (a wastewater treatment sludge) would become listed as K151. The commenter states that segregation of the chlorinated toluenes production waste from the other streams may be feasible, but the capital cost to perform this is estimated to exceed \$250,000.

The Agency notes that, as part of its sampling and analysis efforts to support the listing of chlorinated toluene wastes, the commenter's subject mixed production wastes, as currently managed in an unsegregated fashion, were found to contain high levels of the contaminants of concern that are persistent and mobile in the environment. This waste was found to contain high levels of toxic organic constituents even after being mixed with other non-chlorinated toluenes production wastes.¹

¹ However, should any of the commenters' mixed waste streams contain low levels of toxic constituents, the commenter may petition the

The Agency believes that mixing the chlorinated toluenes production wastes with other wastes to form a large volume of contaminated waste is contrary to waste minimization goals. Although the rule does not require facilities to segregate wastes, EPA encourages facilities to reduce the volume of hazardous wastes. Segregation of hazardous wastes from non-hazardous sources could be one method of achieving this goal. In evaluating the burden created by a new rule, however, the Agency only considers capital costs incurred through investments to segregate or otherwise manage wastes if this investment is the least burdensome method of compliance with the regulation. Based on the available information, the Agency believes no capital outlays are required due to today's rule because all newly-listed wastes, including the commenters (whose waste currently exhibit the characteristic of ignitability), are already managed on-site as hazardous waste. Therefore, the Agency continues to estimate increased waste management costs of less than \$12,000 per year for all facilities due to today's new listings.²

As stated above, today's subject wastes are listed because of the presence of mobile and persistent toxic constituents in these wastes and therefore removal of the ignitability characteristic would not necessarily render these waste streams non-toxic.

3. Generation Volume of K151

One commenter, a chlorinated toluenes manufacturer, states that the Agency underestimated the quantity of K151 generated nationwide (i.e., 600 metric tons/year). See 56 FR 51596 (October 11, 1991). The commenter stated that his facility generated 25,692 tons of primary sludge in 1990. The commenter requested that the volume of this waste stream be included in the tabulation of Table 2 of the proposed rule and be considered when determining a available treatment

Agency for a delisting pursuant to the requirements of 40 CFR 260.20 and 40 CFR 260.22.

² The Agency notes, however, that should the commenter be successful in addressing the ignitable characteristic of the waste stream (assuming the subject commenter's estimate of an incurred capital cost of \$250,000 for segregation of the subject waste stream is correct), the facility would incur an additional estimated cost of \$40,000 per year for the first 10 years following promulgation of the rule. (This is based on annualizing the capital investment cost of \$250,000 over 10 years at a 9.5 percent interest rate.) The facility may embark on this capital investment if, after comparing it to the operating costs associated with managing the mixed waste stream as hazardous, it believes it to be a sound investment.

capacity in future land disposal restrictions determinations.

The Agency wishes to clarify the scope of the K151 wastes. The K151 wastes include, but are not limited to, skimmings and sludges from oil/water separators, sludges from settling basins upstream of wastewater treatment, and other residuals from physical separation processes in the absence of other neutralization or biological treatment. These wastes have been found to contain high levels of hazardous constituents and to otherwise meet the criteria for listing wastes as hazardous. Conversely, wastes generated from chemical neutralization or biological treatment do not meet the criteria for hazardous wastes and thus are not included in the scope of K151.

Based on information previously provided to the Agency by the commenter in support of the proposed rule, the Agency does not believe that the sludge in question is K151 because it is generated after neutralization. The Agency's detailed justification is in the docket for this rule. Therefore, the Agency maintains that its original estimate of 600 metric tons as the annual generation rate of K151 is valid.

4. Weight-of-Evidence Classification of Perchloroethylene and Chloromethane and Other Minor Technical Revisions

Two comments concerned the weight-of-evidence classification of tetrachloroethylene (perchloroethylene or PCE) as a B2, probable human carcinogen (with a footnote stating that the Agency is re-evaluating this classification). One commenter stated that on January 8, 1991 (56 FR 643), EPA "corrected" the classification of PCE from B2, probable human carcinogen, to C, possible human carcinogen, and amended the preamble to two recent final rules, (August 14, 1989 (54 FR 33418)) and (December 11, 1989 (54 FR 50968)), to reflect the change. The commenter suggested that the Agency use the C classification in today's rulemaking. The second commenter suggested that EPA delete any reference to perchloroethylene as a Group B2 carcinogen.

The Agency acknowledges the notice in the *Federal Register* dated January 8, 1991 (56 FR 643), which amends the preamble to regulations published on August 14, 1989 (54 FR 33418), to establish reportable quantities under CERCLA for certain substances, and on December 11, 1989 (54 FR 50968), to list certain wastes from the production of chlorinated aliphatic hydrocarbons as hazardous wastes under RCRA. The January 8, 1991 notice (56 FR 643) documented the various weight-of-

evidence assessments performed on tetrachloroethylene to date, by both the Agency and the Science Advisory Board (SAB). That summary will not be repeated here; interested readers may refer to the January 8, 1991 *Federal Register* Notice (56 FR 643). That discussion concluded by stating:

EPA is currently deliberating concerning the weight-of-evidence classification for perchloroethylene and the issues raised and advice offered by the SAB concerning perchloroethylene. When these deliberations are completed, EPA will provide a formal reply to the SAB, under the signature of the Administrator or an appropriate designee, which informs the SAB of the Agency's response to the SAB's issues and advice and states the Agency's final position on the weight-of-evidence classification of perchloroethylene.

(56 FR 644 (January 8, 1991)). Based on the discussion presented in the notice (56 FR 643), EPA deleted perchloroethylene from substances referred to at 54 FR 50974 (December 11, 1989), without qualification, as Group B2 carcinogens. However, the notice (56 FR 643) did not reclassify perchloroethylene as a Group C carcinogen.

At the time of the publication of the proposed rule listing K150 and K151, the weight-of-evidence classification for perchloroethylene had not been resolved. However, in the August 1991 final report to the EPA Administrator (Health Effects Assessment of Perchloroethylene, EPA-SAB-EHC-91-013), the SAB's Environmental Health Committee recommended, after an extensive review, that perchloroethylene be placed on a "continuum between B2 and C." SAB's rationale was that although the evidence was not strong enough to warrant designation of PCE as a B2, probable human carcinogen, the evidence for carcinogenicity is stronger than most other compounds classified as C, possible human carcinogen. The Agency has not yet completed its formal response to the SAB recommendation and a designation will not be assigned until EPA has completed its final weight-of-evidence evaluation. As indicated in the January 8, 1991 notice (56 FR 644), EPA's final decision regarding the weight-of-evidence classification will be "separate and distinct from any regulatory evaluations and risk management decisions concerning perchloroethylene."

In order to clarify the fact that there is still no final Agency-wide weight-of-evidence cancer classification for perchloroethylene, the Agency has deleted the reference to this classification in Tables 3 and 4 (Tables 4 and 5 of the proposed rule). The final

position on that classification is not relevant to this listing because the health-based level for perchloroethylene used in support of the listing is based on a final MCL (see 56 FR 51596-51601, October 11, 1991) which was calculated in the absence of a formal Agency weight-of-evidence cancer classification for perchloroethylene (for more information regarding this MCL, see 56 FR 3526 and 3541 (January 30, 1991)).

One commenter also identified some technical errors in the toxicological endpoints for the carcinogenicity of perchloroethylene. These errors have been addressed in the Health Effects Background document prepared for this final rule.

One commenter questioned EPA's use of the 24-month mouse study that resulted in kidney tumors as the basis for the inhalation carcinogenic potency factor for chloromethane (methyl chloride). The commenter stated that the tumors were observed only in male mice and only at the highest dose level of 1,000 ppm. According to the commenter, EPA's Office of Toxic Substances (OTS) requested industry to repeat the above study in both mice and rats with a increased number of dose levels "on the basis that EPA could not calculate or determine a cancer risk based on a single data point." The commenter noted that this additional study was never performed. Based on this, the commenter stated that the data should not now be used to support the estimation of a slope factor for chloromethane and that the information on carcinogenicity presented in EPA's Integrated Risk Information System (IRIS) are invalid.

As stated by the commenter, the Agency used an interim oral slope factor of 1.3×10^{-2} mg/kg/day based on a route-to-route extrapolation from the CIFF mouse inhalation study in the proposed rule. The Agency is continuing to use this number in the final rule, because although additional information could lead to greater confidence in the slope factor, the Agency has determined that the current level of data is sufficient to estimate carcinogenic potency (for more information, see the Health Effects background document in the docket for today's rule).³ Contrary to the commenter's statement, Agency guidelines do allow slope factors to be calculated from effects observed only at the highest dose level (see Guidelines

³ Although the source for this value in the proposed rule was IRIS, this number was recently removed from IRIS. Consistent with Agency policy, the new source for the number is the Health Effects Assessment Summary Tables (HEAST).

for Carcinogenic Risk Assessment (U.S. EPA, 1986a) which the available in the docket).

Furthermore, the Agency believes that even though this slope factor is currently under review by the Agency, the levels of chloromethane in K149 and K150 are so high that the compound poses a potential risk to human health and the environment if the wastes are mismanaged. This is because the concentrations of chloromethane in K149 and K150 (i.e., 7,000 and 13,500 mg/kg, respectively) are in excess of one million times the health-based level for chloromethane. Even if the health-based level were raised significantly based on further review by the Agency, the concentrations of chloromethane in the wastes would most likely still be present at levels that are several orders of magnitude above those considered to be of concern. In addition, the bases for listing K149 and K150 wastes include 13 constituents other than chloromethane. The presence of these other hazardous constituents, without the inclusion of chloromethane, at levels that could potentially harm human health and the environment, provides adequate justification for finalizing today's listings.

The commenter also questioned the "Group C" weight-of-evidence classification for chloromethane. Although the cancer classification for chloromethane had no effect or bearing on this listing decision, the Agency notes that EPA currently verified the "C" classification on IRIS. This classification was based on the CIIT study and other additional information, and interested readers may consult the background document for further information regarding this classification.

The health effects information and/or HBLs of the constituents of concern that have been changed since the proposal, or were in error in the proposal, have been revised to reflect the EPA's current data base. This information was added to the health effects assessment background document prepared for this final rule and is summarized in Tables 2, 3, and 4.

5. Typographical Error

A commenter notes that a typographical error appears in the proposed rule. The Agency agrees with the commenter that the proposed definition of K149 in 40 CFR 302.4 should read:

"* * * (this waste does not include still bottoms from the distillation of benzyl chloride)." (See 56 FR 51608, October 11, 1991.)

6. "Automatic Delisting" Provision

One commenter suggested that, if the rule is promulgated as proposed, an "automatic delisting" provision should be established for wastes that do not meet any of the hazardous waste characteristics.

The Agency has listed today's wastes because of the presence of toxic constituents for which the Agency has not set hazardous characteristics levels. Of the 15 constituents which comprise the basis for listing these wastes, 8 are not Toxicity Characteristic (TC) constituents. Therefore, even if these wastes could be treated to a point where the wastes no longer exhibit any of RCRA's hazardous waste characteristics, the constituents not regulated by the TC may still be present at hazardous levels in these wastes. Furthermore, the Agency is also concerned that since the thick and hydrophobic nature of these wastes parallels the characteristics of oily and greasy wastes, the concentrations of constituents may be underestimated by the Toxicity Characteristic Leaching Procedure (for more information regarding such concerns, see the proposed Hazardous Waste Identification Rule, 57 FR 21473 (May 20, 1992)). An exemption program based solely on the present RCRA characteristics program, therefore, would be inappropriate.

IV. Impact of Future Land Disposal Restrictions (LDR) Determinations

The statute requires EPA to promulgate land disposal prohibitions—that is, prohibit from land disposal hazardous wastes that do not meet the pretreatment standards promulgated under section 3004(m) and that are not disposed in so-called no-migration units—under a specific schedule for wastes identified and listed prior to the enactment of the 1984 amendments (RCRA sections 3004(d), 3004(e), and 3004(g)(5), 42 U.S.C. 6924(d), (e) and (g)(5)). If the Agency failed to promulgate land disposal restrictions by the dates specified in section 3004(g)(4), the wastes were absolutely prohibited from land disposal after May 8, 1990, (or in some cases November 8, 1986 or July 8, 1987). The Agency also is required to make a land disposal prohibition determination for any hazardous waste that is identified or listed in 40 CFR part 261 after November 8, 1984, within 6 months after the listing or identification becomes effective (RCRA section 3004(g)(4), 42 U.S.C. 6924(g)(4)). However, the statute does not provide for automatic restriction or prohibition

of the land disposal of such wastes if EPA fails to meet this deadline.

Although some of the wastes covered by today's notice are being listed, in part, because of the presence of the same hazardous constituents found in K015, they are newly-listed wastes, and therefore, the treatment standards for K015 do not apply to today's newly-listed wastes. Because the Agency has not yet completed treatability and capacity analyses for these newly-listed wastes, land disposal restrictions for the wastes listed today are expected to be addressed by April 1993. It should be noted that because the statute does not provide for automatic restriction or prohibition of land disposal for newly-identified wastes until such restrictions are promulgated, land disposal of these wastes will not be restricted or prohibited until the Agency promulgates land disposal restrictions (unless the wastes exhibit one of the hazardous waste characteristics or meet other land disposal prohibitions, such as that on disposing of liquids in landfills). Wastes that exhibit the characteristic of toxicity using the toxicity characteristic leaching procedure (SW-846 Method 1311) are considered newly-identified and are not covered by the LDR, unless the waste also exhibits the characteristic of toxicity using the extraction procedure (SW-846 Method 1314) (see the Third Land Disposal Restrictions Rule, June 1, 1990, 55 FR 22520).

Most of today's newly listed wastes are expected to exhibit the characteristics of ignitability, corrosivity, or reactivity and thus are already subject to the land disposal restrictions standards for those characteristics, which include reporting, recordkeeping, and tracking requirements, dilution and storage prohibitions, and treatment standards (see 55 FR 22520, June 1, 1990). These wastes also may be subject to certain California List treatment standards if not already covered by a more specific prohibition (see 55 FR 22674, June 1, 1990).

V. State Authority

A. Applicability of Final Rule in Authorized States

Under section 3006 of RCRA, EPA may authorize qualified States to administer and enforce the RCRA program within the State. (See 40 CFR part 271 for the standards and requirements for authorization.) Following authorization, EPA retains enforcement authority under sections 3007, 3008, 3013, and 7003 of RCRA,

although, authorized States have primary enforcement responsibility.

Before HSWA amended RCRA, a State with final authorization administered its hazardous waste program entirely in lieu of the Federal program in that State. The Federal requirements no longer applied in the authorized State, and EPA could not issue permits for any facilities located in the State with permitting authorization. When new, more stringent Federal requirements were promulgated or enacted, the State was obligated to enact equivalent authority within specified timeframes. New Federal requirements did not take effect in an authorized State until the State adopted the requirements as State law.

By contrast, under section 3006(g) of RCRA, 42 U.S.C. § 6926(g), new requirements and prohibitions imposed by HSWA take effect in authorized States at the same time that they take effect in nonauthorized States. EPA is directed to implement those requirements and prohibitions in authorized States, including the issuance of permits, until the State is granted authorization to do so. While States must still adopt HSWA-related provisions as part of State regulations to retain final authorization, the HSWA requirements apply in authorized States in the interim.

Today's rule is being promulgated pursuant to section 3001(e)(2) of RCRA, a provision added by the HSWA. Therefore, the Agency is amending Table 1 in 40 CFR 271.1(j), which identifies the Federal program requirements that are promulgated pursuant to the HSWA and that take effect in all States, regardless of their authorization status. States may apply for either interim or final authorization for the HSWA provisions identified in Table 1 [40 CFR 271.1(j)], as discussed in the following section of this preamble.

B. Effect on State Authorizations

As noted above, EPA will implement today's rule in authorized States until they modify their programs to adopt this rule and the modifications are approved by EPA. Because today's rule is promulgated pursuant to the HSWA, a State submitting a program modification would be able to apply to receive either interim or final authorization under section 3006(g)(2) or 3006(b), respectively, on the basis of requirements that are substantially equivalent or equivalent to EPA's requirements. The procedures and schedule for State program modifications under section 3006(b) are described in 40 CFR 271.21. The same

procedures should be followed for section 3006(g)(2).

Section 271.21(e)(2) requires that States that have final authorization modify their programs to reflect Federal program changes and that they subsequently submit the modification to EPA for approval. The deadline by which states must modify their programs to adopt this regulation will be determined based on today's date in accordance with 40 CFR 271.21(e)(2).

States with authorized RCRA programs already may have regulations similar to those in today's rule. These State regulations have not been assessed against the Federal regulations being promulgated today to determine whether they meet the tests for authorization. Thus, States are not authorized to implement their States' regulations in lieu of EPA regulations until the State program modification is approved. Of course, States with existing regulations may continue to administer and enforce their regulations as a matter of State law. In implementing the Federal program, EPA will work with States under cooperative agreements to minimize duplication of efforts. In many cases, EPA will be able to defer to the States in their efforts to implement their programs, and thereby avoid taking separate actions under Federal authority.

States that submit official applications for final authorization less than 12 months after the promulgation of EPA's regulations are not required to include standards equivalent to those promulgated in their applications (see 40 CFR 271.3(f)). However, the State must modify its program by the deadlines set forth in § 271.21(e). States that submit official applications for final authorization 12 months after the effective date of these standards must include equivalent standards in their application. Section 271.3 sets forth the requirements that a State must meet when submitting its final authorization application.

VI. CERCLA Designation and Reportable Quantities

All hazardous wastes listed in 40 CFR 261.31 through 261.33, as well as any solid waste that meets one or more of the characteristics of a RCRA hazardous waste (as defined at 40 CFR 261.21 through 261.24), are hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (CERCLA), pursuant to CERCLA section 101(14). Therefore, the three chlorinated toluenes waste streams listed as hazardous under RCRA by this final rule (K149, K150, and

K151) are CERCLA hazardous substances. CERCLA hazardous substances are listed in Table 302.4 at 40 CFR 302.4 along with their reportable quantities (RQs); thus, EPA is today adding entries for K149, K150, K151 to Table 302.4.

A. Reporting Requirements

Under CERCLA section 103(a), the person in charge of a vessel or facility from which a hazardous substance is released in a quantity that equals or exceeds its RQ must immediately upon knowledge notify the National Response Center of the release (see 40 CFR part 302). In addition to this reporting requirement under CERCLA, section 304 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) requires owners or operators of certain facilities to report the release of a CERCLA hazardous substance to State and local authorities. EPCRA section 304 notification must be given immediately after the release of an RQ or more to the community emergency coordinator of the local emergency planning committee for each area likely to be affected by the release, and to the State emergency planning commission of any State likely to be affected by the release.

B. Adjustment of RQs

Under section 102(b) of CERCLA, all hazardous wastes newly designated under CERCLA will have a statutory RQ of one pound unless and until adjusted by regulation. The Agency's methodology for adjusting RQs of individual hazardous substances begins with an evaluation of the intrinsic physical, chemical, and toxicological properties of each hazardous substance.⁴ The intrinsic properties examined—called "primary criteria"—are aquatic toxicity, mammalian toxicity (oral, dermal, and inhalation), ignitability, reactivity, chronic toxicity, and potential carcinogenicity. Generally, for each intrinsic property, the Agency ranks hazardous substances on a scale, associating a specific range of values on each scale with an RQ of 1, 10, 100, 1000, or 5000 pounds. The data for each hazardous substance are evaluated using various primary criteria; each hazardous substance may receive several tentative RQ values based on its particular intrinsic properties. The lowest of the tentative RQs becomes the

⁴ For more detailed information on this methodology, see the preamble to an RQ adjustment final rule published on August 14, 1990 (55 FR 33428). A different methodology is used to assign adjusted RQs to radionuclides (see 54 FR 22524, May 24, 1989).

"primary criteria RQ" for that substance.

After the primary criteria RQs are assigned, substances are further evaluated for their susceptibility to certain degradative processes, which are used as secondary adjustment criteria. These natural degradative processes are biodegradation, hydrolysis, and photolysis (BHP). If a hazardous substance, when released into the environment, degrades relatively rapidly to a less hazardous form by one or more of the BHP processes, its RQ (as determined by the primary RQ adjustment criteria), is generally raised one level.⁶ This adjustment is made because the relative potential for harm to public health or welfare or the environment posed by the release of such a substance is reduced by these degradative processes. Conversely, if a hazardous substance degrades to a more hazardous product after its release, the original substance is assigned an RQ equal to the RQ for the more hazardous substance, which may be one or more levels lower than the RQ for the original substance. The downward adjustment is appropriate because the hazard posed by the release of the original substance is increased as a result of BHP.

The methodology summarized above is applied to adjust the RQs of individual hazardous substances. An additional process applies to RCRA waste streams, which contain individual hazardous substances as constituents. As the Agency has stated (54 FR 33440, August 14, 1989), to assign an RQ to a waste stream, the Agency determines the RQ for each waste stream constituent and then assigns the lowest of these constituent RQs to the waste stream itself.

The lowest constituent RQ for each of the waste streams that are the subject of today's final rule (K149, K150, and K151) is 10 pounds. In order to coordinate RCRA and CERCLA rulemakings, the Agency proposed to adjust the one-pound statutory RQs for each of these waste streams to 10 pounds in its October 11, 1991, proposed rule (56 FR 51592). EPA received no comments on these proposed RQ adjustments. The Agency is therefore promulgating these RQ adjustments by including final adjusted RQs of 10 pounds for waste streams K149, K150, and K151 in Table 302.4.

⁶ No RQ level increase based on BHP occurs if the primary criteria RQ is already at its highest possible level (100 pounds for potential carcinogens and 5000 pounds for all other types of hazardous substances except radionuclides). BHP is not applied to radionuclides.

VII. Compliance Dates

A. Notification

Under the Solid Waste Disposal Amendments of 1980 (Pub L. 96-452), EPA was given the option of waiving the notification requirement under section 3010 of RCRA following revision of the section 3001 regulations, at the discretion of the Administrator.

As proposed, EPA is waiving the notification requirement as unnecessary for persons already identified within the hazardous waste management universe. EPA is not waiving the notification requirement for waste handlers who have neither notified the Agency that they may manage hazardous wastes nor received an EPA identification number.

B. Interim Status

Because HSWA requirements are applicable in authorized States at the same time as in unauthorized States, EPA will regulate K 149, K150, and K151 until States are authorized to regulate these wastes. Thus, once this regulation becomes effective, EPA will apply Federal regulations to these wastes and to their management in both authorized and unauthorized States. Facilities that treat, store, or dispose of K149, K150, and K151, but that have not received a permit pursuant to section 3005 of RCRA and are not operating pursuant to interim status, might be eligible for interim status (see section 3005(e)(1)(A)(ii) of RCRA, as amended). To operate under interim status, the eligible facilities will be required to submit a section 3010 notification (when the requirement is waived, as explained above), pursuant to 40 CFR 270.70(g) and will be required to submit a Part A permit application within 6 months of promulgation of today's listing pursuant to § 270.10(e).

Under RCRA section 3005(e)(3) and 40 CFR 270.73(d), within 18 months of promulgation of today's listing, land disposal facilities qualifying for interim status under section 3005(e)(1)(A)(ii) also will be required to submit a Part B permit application and certify that the facility is in compliance with all applicable ground-water monitoring and financial responsibility requirements. If the facility fails to do so, interim status will terminate on that date.

All existing hazardous waste management facilities (as defined in 40 CFR 270.2) that treat, store, or dispose of K149, K150, and K151 and that are currently operating pursuant to interim status under section 3005(e) of RCRA, will be required to file with EPA an amended Part A permit application within 6 months of promulgation of today's listing.

C. Permitting Requirements

Physical construction of any new facility that will treat, store, or dispose of these wastes may not commence until Parts A and B of the permit application have been submitted and a RCRA permit has been approved. (See 40 CFR 270.10(f).)

Under current regulations, a hazardous waste management facility that has received a permit pursuant to section 3005 may not treat, store, or dispose of K149, K150, and K151 unless the permit modification procedures set forth in 40 CFR 270.42(g) are satisfied.

Under 40 CFR 270.42(g)(1)(v), for newly regulated land disposal units, permitted facilities must certify that the facility is in compliance with all applicable 40 CFR 265 ground-water monitoring and financial responsibility requirements no later than April 15, 1994. If the facility fails to submit these certification, authority to manage the newly listed wastes under 40 CFR 270.42(g) will terminate on that date.

VIII. Economic Analysis

Under Executive Order 12291, EPA must determine whether a regulation is "major" and, therefore, subject to the requirements of a Regulatory Impact Analysis (RIA). As mentioned in the preamble to the October 11, 1991 proposed rule, the total additional cost for disposal of these wastes as hazardous is approximately \$12,000 per year, which is significantly less than the \$100 million constituting a major regulation.

Since EPA does not expect that the amendments promulgated by today's rule will have an annual effect on the economy of \$100 million or more or result in a measurable increase in cost or prices, or have an adverse impact on the ability of U.S.-based enterprises to compete with either domestic or foreign markets, these amendments are not believed to constitute a major action. Therefore, an RIA is not required.

IX. Regulatory Flexibility Act

Pursuant to the Regulatory Flexibility Act, 5 U.S.C. 601-612, whenever an agency is required to publish a general notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the impact of the rule on small entities (i.e., small businesses, small organizations, and small governmental jurisdictions). However, if the head of the agency certifies that the rule will not have a significant impact on a substantial number of small entities, no

regulatory flexibility analysis is required.

The hazardous wastes proposed to be listed here are not generated by small entities (as defined by the Regulatory Flexibility Act). Accordingly, I hereby certify that this amendment would not have a significant economic impact on a substantial number of small entities. Therefore, this regulation does not require a regulatory flexibility analysis.

X. Paperwork Reduction Act

This rule does not contain any information collection requirements subject to OMB review under the Paperwork Reduction Act of 1980, 44 U.S.C. 3501 *et seq.*

List of Subjects

40 CFR Part 261

Hazardous materials, Waste treatment and disposal, Recycling,

40 CFR Part 271

Administrative practice and procedure, Confidential business information, Hazardous materials transportation, Hazardous waste, Indian lands, Intergovernmental relations, Penalties, Reporting and recordkeeping requirements, Water pollution control, Water supply.

40 CFR Part 302

Air pollution control, Chemicals, Emergency Planning and Community Right-To-Know Act, Extremely hazardous substances, Hazardous chemicals, Hazardous materials, Hazardous materials transportation, Hazardous substances, Hazardous wastes, Intergovernmental relations, Natural resources, Pesticides and pests, Reporting and recordkeeping requirements, Superfund, Waste

treatment and disposal, Water pollution control, Water supply.

Dated: September 30, 1992.
William K. Reilly,
Administrator.

For the reasons set out in the preamble, Chapter I, Title 40 of the Code of Federal Regulations is amended as follows:

PART 261—IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

1. The authority citation for Part 261 continues to read as follows: 42 U.S.C. 6905, 6912(a), 6921, 6922, and 6938.

2. In § 261.32, add the following waste streams in alpha-numeric order to the subgroup "Organic Chemicals" in the table:

§ 261.32 Hazardous wastes from specific sources.

Industry and EPA hazardous waste No.	Hazardous waste	Hazard code
K149	Distillation bottoms from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups. (This waste does not include still bottoms from the distillation of benzyl chloride.)	(T)
K150	Organic residuals, excluding spent carbon adsorbent, from the spent chlorine gas and hydrochloric acid recovery processes associated with the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.	(T)
K151	Wastewater treatment sludges, excluding neutralization and biological sludges, generated during the treatment of wastewaters from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.	(T)

3. Add the following entries in alpha-numeric order to Appendix VII of Part 261:

APPENDIX VII.—BASIS FOR LISTING HAZARDOUS WASTE

EPA hazardous waste No.	Hazardous constituents for which listed
K149	Benzotrichloride, benzyl chloride, chloroform, chloromethane, chlorobenzene, 1,4-dichlorobenzene, hexachlorobenzene, pentachlorobenzene, 1,2,4,5-tetrachlorobenzene, toluene.
K150	Carbon tetrachloride, chloroform, chloromethane, 1,4-dichlorobenzene, hexachlorobenzene, pentachlorobenzene, 1,2,4,5-tetrachlorobenzene, 1,1,2,2-tetrachloroethane, tetrachloroethylene, 1,2,4-trichlorobenzene.
K151	Benzene, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene.

PART 271—REQUIREMENTS FOR AUTHORIZATION OF STATE HAZARDOUS WASTE PROGRAMS

4. The authority citation for part 271 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), and 6926. § 271.1 Purpose and scope.

5. § 271.1(j) is amended by adding the following entry to Table 1 in chronological order by date of publication:

TABLE 1.—REGULATIONS IMPLEMENTING THE HAZARDOUS AND SOLID WASTE AMENDMENTS OF 1984

Promulgation date	Title of regulation	Federal Register reference	Effective date
October 15, 1992	Listing Wastes from the Production of Chlorinated Toluenes.	[Insert Federal Register page numbers].	April 15, 1993.

PART 302—DESIGNATION, REPORTABLE QUANTITIES, AND NOTIFICATION

Authority: 42 U.S.C. 9602, 9603, and 9604; 33 U.S.C. 1321 and 1361.

§ 302.4 Designation of hazardous substances.

7. Section 302.4 is amended by adding the following entries to Table 302.4:

6. The authority citation for part 302 continues to read as follows:

TABLE 302.4.—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES

[Note: All comments/notes are located at the end of this table.]

Hazardous substance	CASRN	Regulatory synonyms	Statutory			Final RQ	
			RQ	Code ⁴	RCRA waste No.	Category	Pounds (kg)
K149 Distillation bottoms from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups. [This waste does not include still bottoms from the distillation of benzyl chloride.]			1*	4	K149	A	10 (4.54)
K150 Organic residuals, excluding spent carbon adsorbent, from the spent chlorine gas and hydrochloric acid recovery processes associated with the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.			1*	4	K150	A	10 (4.54)
K151 Wastewater treatment sludges, excluding neutralization and biological sludges, generated during the treatment of wastewaters from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.			1*	4	K151	A	10 (4.54)

1 indicates the statutory source as defined by 1, 2, 3, 4, or 5 below.

4 indicates that the statutory source for designation of this hazardous substance under CERCLA is RCRA section 3001.

1* indicates that the 1-pound RQ is a CERCLA statutory RQ.

[FR Doc. 92-24232 Filed 10-14-92; 8:45 am]

BILLING CODE 6580-50-M